

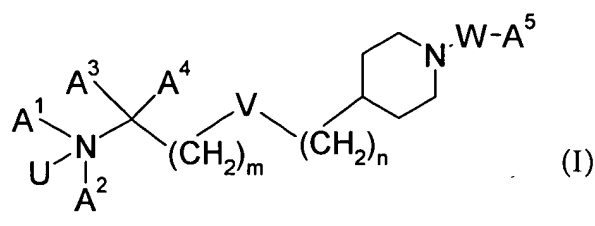
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-3 (canceled).

4. (currently amended) The A compound according to claim 2, wherein of formula (I)



wherein

U is a lone pair;

V is -C≡C-;

m and n are each integers from 0 to 7 and m+n is 0 to 7;

W is SO₂, or SO₂NR¹,

A¹ is H, lower-alkyl or lower-alkenyl,

A² is cycloalkyl, cycloalkyl-lower-alkyl, lower-alkenyl, lower-alkynyl or lower-alkyl optionally substituted with hydroxy, lower-alkoxy or lower-alkoxy-carbonyl, or

A¹ and A² bond together to form -A¹-A²-, wherein -A¹-A²- is lower-alkylene or lower-alkenylene, optionally substituted by R², and one -CH₂- group of -A¹-A²- is optionally replaced by NR³, S, or O;

A³ and A⁴ are independently hydrogen or lower-alkyl;

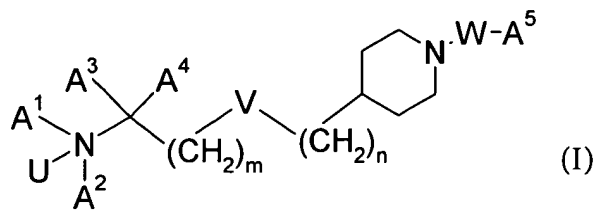
A⁵ is lower-alkyl optionally substituted with halogen, lower-alkenyl, lower-alkoxy-carbonyl-lower-alkyl, cycloalkyl, cycloalkyl-lower-alkyl, aryl, aryl-lower-alkyl, heteroaryl, or heteroaryl-lower-alkyl;

R² is lower-alkyl, hydroxy, hydroxy-lower-alkyl, or N(R⁴, R⁵);

R¹, R³, R⁴ and R⁵ are independently hydrogen or lower-alkyl; and

When A¹ is not bonded to A², A¹ and A³ optionally bond together to form -A¹-A³-, wherein -A¹-A³- is lower-alkylene or lower-alkenylene, optionally substituted by R², and one -CH₂- group of -A¹-A³- is optionally replaced by NR³, S, or O; or
pharmaceutically acceptable salts or esters of the compounds of formula (I).

5. (currently amended) ~~The A compound according to claim 2, wherein of~~
formula (I)



wherein

U is a lone pair;

V is -CH₂-;

m and n are each integers from 0 to 7 and m+n is 0 to 7;

W is SO₂, or SO₂NR¹,

A¹ is H, lower-alkyl or lower-alkenyl,

A² is cycloalkyl, cycloalkyl-lower-alkyl, lower-alkenyl, lower-alkynyl or lower-alkyl optionally substituted with hydroxy, lower-alkoxy or lower-alkoxy-carbonyl, or

A¹ and A² bond together to form -A¹-A²-, wherein -A¹-A²- is lower-alkylene or lower-alkenylene, optionally substituted by R², and one -CH₂- group of -A¹-A²- is optionally replaced by NR³, S, or O;

A³ and A⁴ are independently hydrogen or lower-alkyl;

A⁵ is lower-alkyl optionally substituted with halogen, lower-alkenyl, lower-alkoxy-carbonyl-lower-alkyl, cycloalkyl, cycloalkyl-lower-alkyl, aryl, aryl-lower-alkyl, heteroaryl, or heteroaryl-lower-alkyl;

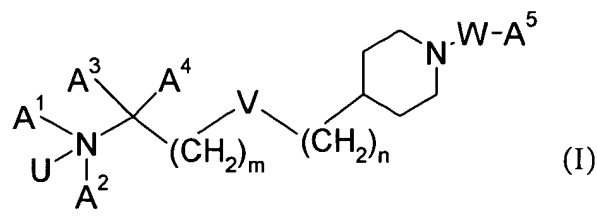
R² is lower-alkyl, hydroxy, hydroxy-lower-alkyl, or N(R⁴, R⁵);

R¹, R³, R⁴ and R⁵ are independently hydrogen or lower-alkyl; and

When A¹ is not bonded to A², A¹ and A³ optionally bond together to form -A¹-A³-, wherein -A¹-A³- is lower-alkylene or lower-alkenylene, optionally substituted by R², and one -CH₂- group of -A¹-A³- is optionally replaced by NR³, S, or O; or pharmaceutically acceptable salts or esters of the compounds of formula (I).

6. (canceled).

7. (currently amended) ~~The A compound according to claim 6, wherein of~~
formula (I)



wherein

U is a lone pair;

V is O, -CH₂-, -CH=CH-, or -C≡C-;

m and n are each integers from 0 to 7 and m+n is 0 to 7;

W is CO, COO, or SO₂NH, with the provisos that:

a) m is 1 to 7 when V is O,

A¹ is H, lower-alkyl or lower-alkenyl,

A² is cycloalkyl, cycloalkyl-lower-alkyl, lower-alkenyl, lower-alkynyl or lower-alkyl optionally substituted with hydroxy, lower-alkoxy or lower-alkoxy-carbonyl, or

A¹ and A² bond together to form -A¹-A²-, wherein -A¹-A²- is lower-alkylene or lower-alkenylene, optionally substituted by R², and one -CH₂- group of -A¹-A²- is optionally replaced by NR³, S, or O;

A³ and A⁴ are independently hydrogen or lower-alkyl;

A⁵ is lower-alkyl optionally substituted with halogen, lower-alkenyl, lower-alkoxy-carbonyl-lower-alkyl, cycloalkyl, cycloalkyl-lower-alkyl, aryl, aryl-lower-alkyl, heteroaryl, or heteroaryl-lower-alkyl;

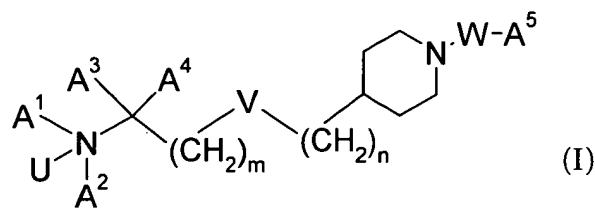
R² is lower-alkyl, hydroxy, hydroxy-lower-alkyl, or N(R⁴, R⁵);

R¹, R³, R⁴ and R⁵ are independently hydrogen or lower-alkyl; and

When A¹ is not bonded to A², A¹ and A³ optionally bond together to form -A¹-A³-, wherein -A¹-A³- is lower-alkylene or lower-alkenylene, optionally substituted by R², and one -CH₂- group of -A¹-A³- is optionally replaced by NR³, S, or O; or
pharmaceutically acceptable salts or esters of the compounds of formula (I).

Claims 8-12 (canceled).

13. (currently amended) ~~The A compound according to claim 2, wherein of~~
formula (I)



wherein

U is a lone pair;

V is O, -CH₂-, -CH=CH-, or -C≡C-;

m is an integer from 0 to 2;

n is an integer from 0 to 7;

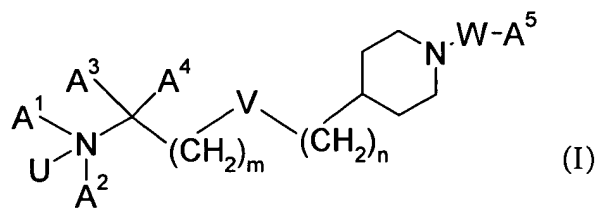
m+n is 0 to 7;

W is SO₂, or SO₂NR¹, with the provisos that:

a) $m+n$ is 1 or 2 when V is $-\text{CH}_2-$ and W is SO_2 ,
b) $m=n=0$ when V is $-\text{CH}=\text{CH}-$ and W is SO_2 ,
c) m is 1 to 2 when V is O, and
d) m is 1 to 2 when V is O, W is SO_2 , and n is 0;
 A^1 is H, lower-alkyl or lower-alkenyl,
 A^2 is cycloalkyl, cycloalkyl-lower-alkyl, lower-alkenyl, lower-alkynyl or lower-alkyl
optionally substituted with hydroxy, lower-alkoxy or lower-alkoxy-carbonyl, or
 A^1 and A^2 bond together to form $-\text{A}^1-\text{A}^2-$, wherein $-\text{A}^1-\text{A}^2-$ is lower-alkylene or lower-
alkenylene, optionally substituted by R^2 , and one $-\text{CH}_2-$ group of $-\text{A}^1-\text{A}^2-$ is
optionally replaced by NR^3 , S, or O;
 A^3 and A^4 are independently hydrogen or lower-alkyl;
 A^5 is lower-alkyl optionally substituted with halogen, lower-alkenyl, lower-alkoxy-
carbonyl-lower-alkyl, cycloalkyl, cycloalkyl-lower-alkyl, aryl, aryl-lower-alkyl,
heteroaryl, or heteroaryl-lower-alkyl;
 R^2 is lower-alkyl, hydroxy, hydroxy-lower-alkyl, or $\text{N}(\text{R}^4, \text{R}^5)$;
 R^1 , R^3 , R^4 and R^5 are independently hydrogen or lower-alkyl; and
When A^1 is not bonded to A^2 , A^1 and A^3 optionally bond together to form $-\text{A}^1-\text{A}^3-$,
wherein $-\text{A}^1-\text{A}^3-$ is lower-alkylene or lower-alkenylene, optionally substituted by R^2 , and
one $-\text{CH}_2-$ group of $-\text{A}^1-\text{A}^3-$ is optionally replaced by NR^3 , S, or O; or
pharmaceutically acceptable salts or esters of the compounds of formula (I).

Claims 14-16 (canceled).

17. (currently amended) The A compound according to claim 2, wherein of
formula (I)



wherein

U is a lone pair;

V is O, -CH₂-, -CH=CH-, or -C≡C-;

m and n are each integers from 0 to 7 and m+n is 0 to 7;

W is SO₂, or SO₂NR¹, with the provisos that:

a) m+n is 1 or 2 when V is -CH₂- and W is SO₂;

b) m=n=0 when V is -CH=CH- and W is SO₂;

c) m is 1 to 7 when V is O, and

d) m is 1 to 3 when V is O, W is SO₂, and n is 0;

A¹ and A² are bonded together to form -A¹-A²-, wherein -A¹-A²- is lower-alkylene or lower-alkenylene, optionally substituted by R², and one -CH₂- group of -A¹-A²- is optionally replaced by NR³, S, or O;

A³ and A⁴ are independently hydrogen or lower-alkyl;

A⁵ is lower-alkyl optionally substituted with halogen, lower-alkenyl, lower-alkoxy-carbonyl-lower-alkyl, cycloalkyl, cycloalkyl-lower-alkyl, aryl, aryl-lower-alkyl, heteroaryl, or heteroaryl-lower-alkyl;

R² is lower-alkyl, hydroxy, hydroxy-lower-alkyl, or N(lower-alkyl)₂, and

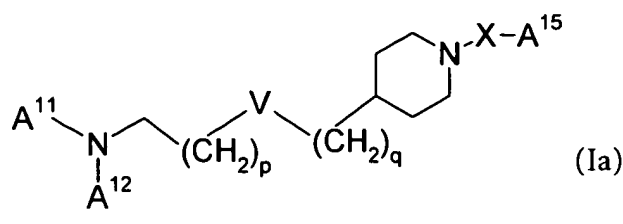
R³ is lower-alkyl; or

pharmaceutically acceptable salts or esters of the compounds of formula (I).

18. (original) The compound according to claim 17, wherein R² is methyl, hydroxy, 2-hydroxy-ethyl, or N(CH₃)₂, and R³ is methyl.

Claims 19-44 (canceled).

45. (currently amended) The A compound of claim 27, wherein of formula (Ia)



wherein

V is O, $-CH_2-$, $-CH=CH-$, or $-C\equiv C-$;

p is an integer from 0 to 5;

q 0, 1 or 2;

X is SO_2NH , with the proviso that:

a) p is 1 to 5 when V is O

A^{11} is methyl or ethyl;

A^{12} is cyclopropyl, lower-alkenyl, or lower-alkyl optionally substituted with hydroxy or lower-alkoxy; and

A^{15} is lower-alkyl optionally substituted with halogen, lower-alkenyl, lower-alkoxy-carbonyl-lower-alkyl, cycloalkyl, cycloalkyl-lower-alkyl, aryl, aryl-lower-alkyl, heteroaryl, or heteroaryl-lower-alkyl; or

pharmaceutically acceptable salts or esters of the compounds of formula (Ia).

46. (original) The compound of claim 45, wherein A^{15} is lower alkyl.

47. (previously presented) A compound selected from the group consisting of 4-[6-(allyl-methyl-amino)-hexyloxy]-piperidine-1-sulfonic acid butylamide and pharmaceutically acceptable salts thereof.

48. (original) The compound of claim 45, wherein A^{15} is cycloalkyl-loweralkyl.

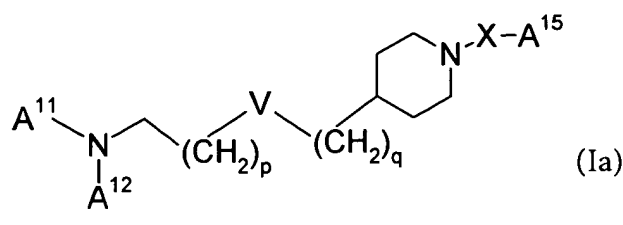
49. (previously presented) A compound selected from the group consisting of 4-[6-(allyl-methyl-amino)-hexyloxy]-piperidine-1-sulfonic acid cyclohexylmethyl-amide, and pharmaceutically acceptable salts thereof.

50. (original) The compound of claim 45, wherein A¹⁵ is phenyl.
51. (previously presented) A compound selected from the group consisting of 4-[6-(allyl-methyl-amino)-hexyloxy]-piperidine-1-sulfonic acid (phenyl)-amide and pharmaceutically acceptable salts thereof.
52. (currently amended) The compound of claim 45, wherein A¹⁵ is phenyl substituted with at least one halogen.
53. (previously presented) A compound selected from the group consisting of 4-[6-(allyl-methyl-amino)-hexyloxy]-piperidine-1-sulfonic acid (4-chloro-phenyl)-amide and pharmaceutically acceptable salts thereof.
54. (previously presented) A compound selected from the group consisting of 4-[6-(allyl-methyl-amino)-hexyloxy]-piperidine-1-sulfonic acid (4-bromo-phenyl)-amide and pharmaceutically acceptable salts thereof.
55. (previously presented) A compound selected from the group consisting of 4-[6-(cyclopropyl-methyl-amino)-hexyloxy]-piperidine-1-sulfonic acid (3,4-difluoro-phenyl)-amide and pharmaceutically acceptable salts thereof.
56. (currently amended) A compound ~~of claim 52,~~ selected from the group consisting of 4-[6-(allyl-methyl-amino)-hexyloxy]-piperidine-1-sulfonic acid (2,5-difluoro-phenyl)-amide and pharmaceutically acceptable salts thereof.
57. (original) The compound of claim 45, wherein A¹⁵ is phenyl substituted with trifluoromethyl.

58. (previously presented) A compound selected from the group consisting of 4-[6-(allyl-methyl-amino)-hexyloxy]-piperidine-1-sulfonic acid (4-trifluoromethyl-phenyl)-amide and pharmaceutically acceptable salts thereof.

59. (canceled)

60. (currently amended) The A compound of ~~claim 26, wherein~~ of formula (Ia)



wherein

V is -CH₂-;

p is an integer from 0 to 5;

q 0, 1 or 2;

X is SO₂, or SO₂NH, with the proviso that:

a) p+q is 1 or 2 when V is -CH₂- and X is SO₂,

A¹¹ is methyl or ethyl;

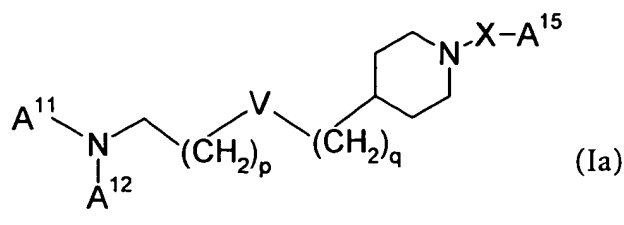
A¹² is cyclopropyl, lower-alkenyl, or lower-alkyl optionally substituted with hydroxy or lower-alkoxy; and

A¹⁵ is lower-alkyl optionally substituted with halogen, lower-alkenyl, lower-alkoxy-carbonyl-lower-alkyl, cycloalkyl, cycloalkyl-lower-alkyl, aryl, aryl-lower-alkyl, heteroaryl, or heteroaryl-lower-alkyl; or

pharmaceutically acceptable salts or esters of the compounds of formula (Ia).

61. (previously presented) A compound selected from the group consisting of methyl-propyl-{4-[1-(4-trifluoromethyl-benzenesulfonyl)-piperidin-4-yl]-butyl}-amine and pharmaceutically acceptable salts thereof.

62. (currently amended) The A compound of ~~claim 26~~, wherein of formula (Ia)



wherein

V is -CH=CH-;

p is an integer from 0 to 5;

q 0, 1 or 2;

X is SO₂, or SO₂NH, with the proviso that:

a) p=q=0 when V is -CH=CH- and X is SO₂,

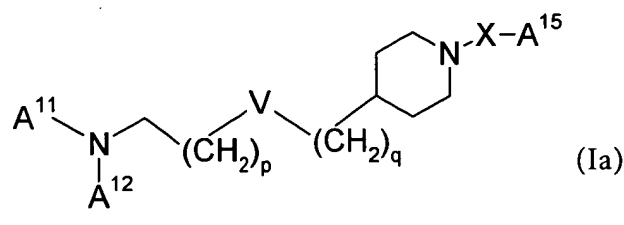
A¹¹ is methyl or ethyl;

A¹² is cyclopropyl, lower-alkenyl, or lower-alkyl optionally substituted with hydroxy or lower-alkoxy; and

A¹⁵ is lower-alkyl optionally substituted with halogen, lower-alkenyl, lower-alkoxy-carbonyl-lower-alkyl, cycloalkyl, cycloalkyl-lower-alkyl, aryl, aryl-lower-alkyl, heteroaryl, or heteroaryl-lower-alkyl; or

pharmaceutically acceptable salts or esters of the compounds of formula (Ia).

63. (currently amended) The A compound of ~~claim 26~~, wherein of formula (Ia)



wherein

V is -C≡C-;

p is an integer from 0 to 5;

q 0, 1 or 2;

X is SO₂, or SO₂NH,

A¹¹ is methyl or ethyl;

A¹² is cyclopropyl, lower-alkenyl, or lower-alkyl optionally substituted with hydroxy or lower-alkoxy; and

A¹⁵ is lower-alkyl optionally substituted with halogen, lower-alkenyl, lower-alkoxy-carbonyl-lower-alkyl, cycloalkyl, cycloalkyl-lower-alkyl, aryl, aryl-lower-alkyl, heteroaryl, or heteroaryl-lower-alkyl; or

pharmaceutically acceptable salts or esters of the compounds of formula (Ia).

Claims 64-66 (canceled).

67. (original) The compound of claim 63, wherein X is SO₂.

68. (previously presented) A compound selected from the group consisting of methyl-propyl-{3-[1-(4-trifluoromethyl-benzenesulfonyl)-piperidin-4-yl]-prop-2-ynyl}-amine and pharmaceutically acceptable salts thereof.

69. (currently amended) ~~The A compound of claim 67,~~ selected from the group consisting of 2-(ethyl-{5-[1-(4-trifluoromethyl-benzenesulfonyl)-piperidin-4-yl]-pent-4-ynyl}-amino)-ethanol, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.

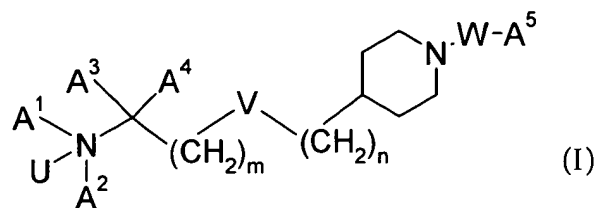
70. (currently amended) ~~The A compound of claim 67,~~ selected from the group consisting of 2-(ethyl-{4-[1-(4-trifluoromethyl-benzenesulfonyl)-piperidin-4-yl]-but-3-ynyl}-amino)-ethanol, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.

71. (previously presented) A compound selected from the group consisting of ethyl-(2-methoxy-ethyl)-{4-[1-(4-trifluoromethyl-benzenesulfonyl)-piperidin-4-yl]-but-3-ynyl}-amine and pharmaceutically acceptable salts thereof.

72. (original) The compound of claim 63, wherein X is SO₂NH.

Claims 73-75 (canceled).

76. (new) A compound of formula (I)



wherein

U is a lone pair;

V is -CH=CH-;

m and n are each integers from 0 to 7 and m+n is 0 to 7;

W is SO₂, or SO₂NR¹, with the provisos that:

a) m=n=0 when V is -CH=CH- and W is SO₂;

A¹ is H, lower-alkyl or lower-alkenyl,

A² is cycloalkyl, cycloalkyl-lower-alkyl, lower-alkenyl, lower-alkynyl or lower-alkyl optionally substituted with hydroxy, lower-alkoxy or lower-alkoxy-carbonyl, or

A¹ and A² bond together to form -A¹-A²-, wherein -A¹-A²- is lower-alkylene or lower-alkenylene, optionally substituted by R², and one -CH₂- group of -A¹-A²- is optionally replaced by NR³, S, or O;

A³ and A⁴ are independently hydrogen or lower-alkyl;

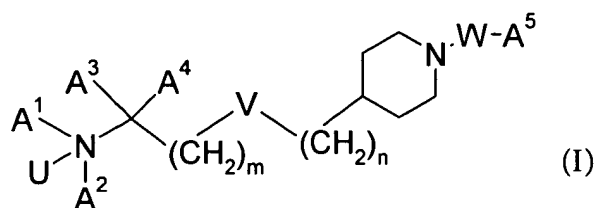
A⁵ is lower-alkyl optionally substituted with halogen, lower-alkenyl, lower-alkoxy-carbonyl-lower-alkyl, cycloalkyl, cycloalkyl-lower-alkyl, aryl, aryl-lower-alkyl, heteroaryl, or heteroaryl-lower-alkyl;

R^2 is lower-alkyl, hydroxy, hydroxy-lower-alkyl, or $N(R^4, R^5)$;

R^1 , R^3 , R^4 and R^5 are independently hydrogen or lower-alkyl; and

When A^1 is not bonded to A^2 , A^1 and A^3 optionally bond together to form $-A^1-A^3-$, wherein $-A^1-A^3-$ is lower-alkylene or lower-alkenylene, optionally substituted by R^2 , and one $-CH_2-$ group of $-A^1-A^3-$ is optionally replaced by NR^3 , S, or O; or pharmaceutically acceptable salts or esters of the compounds of formula (I).

77. (new) A compound of formula (I)



wherein

U is O or a lone pair;

V is $-CH_2-$, $-CH=CH-$, or $-C\equiv C-$;

m and n are each integers from 0 to 7 and $m+n$ is 0 to 7;

W is SO_2 , or SO_2NR^1 , with the provisos that:

a) V is not $-CH_2-$ when W is CO,

b) $m+n$ is 1 or 2 when V is $-CH_2-$ and W is SO_2 ,

c) $m=n=0$ when V is $-CH=CH-$ and W is CO or SO_2 ,

A^1 is H, lower-alkyl or lower-alkenyl,

A^2 is cycloalkyl, cycloalkyl-lower-alkyl, lower-alkenyl, lower-alkynyl or lower-alkyl optionally substituted with hydroxy, lower-alkoxy or lower-alkoxy-carbonyl, or

A^1 and A^2 bond together to form $-A^1-A^2-$, wherein $-A^1-A^2-$ is lower-alkylene or lower-alkenylene, optionally substituted by R^2 , and one $-CH_2-$ group of $-A^1-A^2-$ is optionally replaced by NR^3 , S, or O;

A^3 and A^4 are independently hydrogen or lower-alkyl;

A⁵ is lower-alkyl optionally substituted with halogen, lower-alkenyl, lower-alkoxy-carbonyl-lower-alkyl, cycloalkyl, cycloalkyl-lower-alkyl, aryl, aryl-lower-alkyl, heteroaryl, or heteroaryl-lower-alkyl;

R² is lower-alkyl, hydroxy, hydroxy-lower-alkyl, or N(R⁴, R⁵);

R¹, R³, R⁴ and R⁵ are independently hydrogen or lower-alkyl; and

When A¹ is not bonded to A², A¹ and A³ optionally bond together to form -A¹-A³-, wherein -A¹-A³- is lower-alkylene or lower-alkenylene, optionally substituted by R², and one -CH₂- group of -A¹-A³- is optionally replaced by NR³, S, or O; or pharmaceutically acceptable salts or esters of the compounds of formula (I).

78. (new) The compound according to claim 77, wherein U is a lone pair.

79. (new) The compound according to claim 78, wherein V is -C≡C-.

80. (new) The compound according to claim 78, wherein V is -CH₂-.

81. (new) The compound according to claim 78, wherein V is -CH=CH-.

82. (new) The compound according to claim 78, wherein W is SO₂.

83. (new) The compound according to claim 78, wherein W is SO₂NH.

84. (new) The compound according to claim 78, wherein n is 0 to 2.

85. (new) The compound according to claim 86, wherein n is 0.

86. (new) The compound according to claim 78, wherein m is 1 to 5.

87. (new) The compound according to claim 78, wherein m is 0 to 2.

88. (new) The compound according to claim 78, wherein A^1 is methyl, ethyl or 2-propenyl.

89. (new) The compound according to claim 88, wherein A^2 is methyl, n-propyl, i-propyl, n-butyl, 2-propenyl, 2-propinyl, cyclopropyl, cyclohexyl, cyclopropyl-methylene; or ethyl optionally substituted with hydroxy, methoxy, or ethoxycarbonyl.

90. (new) The compound according to claim 89, wherein A^2 is n-propyl, 2-hydroxy-ethyl, 2-methoxy-ethyl, 2-propenyl, or cyclopropyl.

91. (new) The compound according to claim 78, wherein A^1 and A^2 are bonded together to form $-A^1-A^2-$, wherein R^2 is lower-alkyl, hydroxy, hydroxy-lower-alkyl, or $N(\text{lower-alkyl})_2$, and R^3 is lower-alkyl.

92. (new) The compound according to claim 91, wherein R^2 is methyl, hydroxy, 2-hydroxy-ethyl, or $N(\text{CH}_3)_2$, and R^3 is methyl.

93. (new) The compound according to claim 78, wherein A^3 is hydrogen.

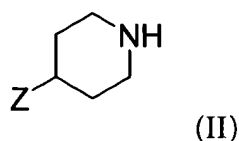
94. (new) The compound according to claims 93, wherein A^4 is hydrogen.

95. (new) The compound according to claim 78, wherein A^5 is lower-alkyl optionally substituted by 1 to 3 substituents selected from the group consisting of fluorine and chlorine; lower-alkenyl, cycloalkyl, cycloalkyl-lower-alkyl, lower-alkoxy-carbonyl-lower-alkyl, naphthyl, furyl-methylene; or phenyl, benzyl or phenyl-ethylene, optionally substituted by 1 to 3 substituents selected from the group consisting of fluorine, chlorine, bromine, CN, CF_3 , NO_2 , lower-alkyl, lower-alkoxy, thio-lower-alkoxy, lower-alkyl-carbonyl, lower-alkoxy-carbonyl, and dioxo-lower-alkylene.

96. (new) The compound according to claim 95, wherein A^5 is lower-alkyl, cycloalkyl-lower-alkyl; or phenyl or benzyl optionally substituted by 1 to 3 substituents selected from the group consisting of fluorine, chlorine, bromine, and CF_3 .

97. (new) The compound according to claim 96, wherein A^5 is n-butyl, i-butyl, cyclohexyl-methylene, phenyl, 4-chloro-phenyl, 4-bromo-phenyl, 2,5-difluoro-phenyl, 3,4-difluoro-phenyl, 4-trifluoromethyl-phenyl, or 4-chloro-benzyl.

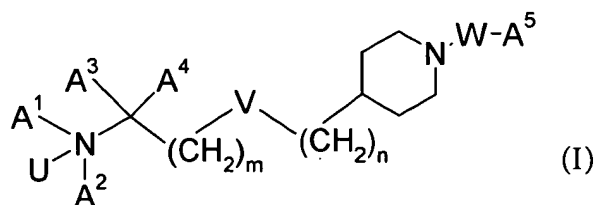
98. (new) A process for the preparation of compounds according to claim 77, which process comprises reacting a compound of formula (II)



wherein Z is $(A^1, A^2)N-C(A^3, A^4)-(CH_2)_m-V-(CH_2)_n-$, $X-CH_2-(CH_2)_m-V-(CH_2)_n-$, $HO(CH_2)_n-$, or $HOOC(CH_2)_n-$, wherein X is chlorine, bromine, iodine, methanesulfonyl, or toluenesulfonyl, and A^1 , A^2 , A^3 , A^4 , V, m and n are as defined in claim 77, with $ClSO_2-A^5$, $ClCOO-A^5$, $ClCSO-A^5$, $OCN-A^5$, $SCN-A^5$, $HOOC-A^5$, or $ClSO_2NR^1-A^5$, wherein A^5 is as defined in claim 77.

99. (new) A pharmaceutical composition comprising a compound according to claim 77 and at least one of a pharmaceutically acceptable carrier or a pharmaceutically acceptable adjuvant.

100. (new) A compound of formula (I)



wherein

U is O or a lone pair;

V is O;

m and n are each integers from 0 to 7 and m+n is 0 to 7;

W is SO_2NR^1 , with the provisos that:

a) m is 1 to 7 when V is O;

A^1 is H, lower-alkyl or lower-alkenyl,

A^2 is cycloalkyl, cycloalkyl-lower-alkyl, lower-alkenyl, lower-alkynyl or lower-alkyl optionally substituted with hydroxy, lower-alkoxy or lower-alkoxy-carbonyl, or

A^1 and A^2 bond together to form $-\text{A}^1-\text{A}^2-$, wherein $-\text{A}^1-\text{A}^2-$ is lower-alkylene or lower-alkenylene, optionally substituted by R^2 , and one $-\text{CH}_2-$ group of $-\text{A}^1-\text{A}^2-$ is optionally replaced by NR^3 , S, or O;

A^3 and A^4 are independently hydrogen or lower-alkyl;

A^5 is lower-alkyl optionally substituted with halogen, lower-alkenyl, lower-alkoxy-carbonyl-lower-alkyl, cycloalkyl, cycloalkyl-lower-alkyl, aryl, aryl-lower-alkyl, heteroaryl, or heteroaryl-lower-alkyl;

R^2 is lower-alkyl, hydroxy, hydroxy-lower-alkyl, or $\text{N}(\text{R}^4, \text{R}^5)$;

R^1 , R^3 , R^4 and R^5 are independently hydrogen or lower-alkyl; and

When A^1 is not bonded to A^2 , A^1 and A^3 optionally bond together to form $-\text{A}^1-\text{A}^3-$, wherein $-\text{A}^1-\text{A}^3-$ is lower-alkylene or lower-alkenylene, optionally substituted by R^2 , and one $-\text{CH}_2-$ group of $-\text{A}^1-\text{A}^3-$ is optionally replaced by NR^3 , S, or O; or

pharmaceutically acceptable salts or esters of the compounds of formula (I).

101. (new) The compound according to claim 100, wherein U is a lone pair.

102. (new) The compound according to claim 101, wherein n is 0 to 2.

103. (new) The compound according to claim 101, wherein n is 0.

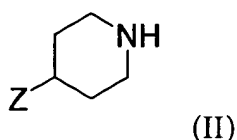
104. (new) The compound according to claim 101, wherein m is 1 to 5.

105. (new) The compound according to claim 101, wherein m is 0 to 2.
106. (new) The compound according to claim 101, wherein A¹ is methyl, ethyl or 2-propenyl.
107. (new) The compound according to claim 106, wherein A² is methyl, n-propyl, i-propyl, n-butyl, 2-propenyl, 2-propinyl, cyclopropyl, cyclohexyl, cyclopropyl-methylene; or ethyl optionally substituted with hydroxy, methoxy, or ethoxycarbonyl.
108. (new) The compound according to claim 107, wherein A² is n-propyl, 2-hydroxy-ethyl, 2-methoxy-ethyl, 2-propenyl, or cyclopropyl.
109. (new) The compound according to claim 101, wherein A¹ and A² are bonded together to form -A¹-A²-, wherein R² is lower-alkyl, hydroxy, hydroxy-lower-alkyl, or N(lower-alkyl)₂, and R³ is lower-alkyl.
110. (new) The compound according to claim 09, wherein R² is methyl, hydroxy, 2-hydroxy-ethyl, or N(CH₃)₂, and R³ is methyl.
111. (new) The compound according to claim 101, wherein A³ is hydrogen.
112. (new) The compound according to claims 111, wherein A⁴ is hydrogen.
113. (new) The compound according to claim 101, wherein A⁵ is lower-alkyl optionally substituted by 1 to 3 substituents selected from the group consisting of fluorine and chlorine; lower-alkenyl, cycloalkyl, cycloalkyl-lower-alkyl, lower-alkoxy-carbonyl-lower-alkyl, naphthyl, furyl-methylene; or phenyl, benzyl or phenyl-ethylene, optionally substituted by 1 to 3 substituents selected from the group consisting of fluorine, chlorine, bromine, CN, CF₃, NO₂, lower-alkyl, lower-alkoxy, thio-lower-alkoxy, lower-alkyl-carbonyl, lower-alkoxy-carbonyl, and dioxo-lower-alkylene.

114. (new) The compound according to claim 113, wherein A^5 is lower-alkyl, cycloalkyl-lower-alkyl; or phenyl or benzyl optionally substituted by 1 to 3 substituents selected from the group consisting of fluorine, chlorine, bromine, and CF_3 .

115. (new) The compound according to claim 114, wherein A^5 is n-butyl, i-butyl, cyclohexyl-methylene, phenyl, 4-chloro-phenyl, 4-bromo-phenyl, 2,5-difluoro-phenyl, 3,4-difluoro-phenyl, 4-trifluoromethyl-phenyl, or 4-chloro-benzyl.

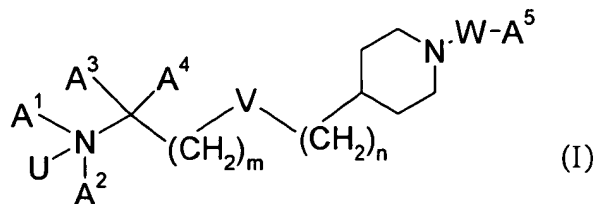
116. (new) A process for the preparation of compounds according to claim 100, which process comprises reacting a compound of formula (II)



wherein Z is $(A^1, A^2)N-C(A^3, A^4)-(CH_2)_m-V-(CH_2)_n-$, $X-CH_2-(CH_2)_m-V-(CH_2)_n-$, $HO(CH_2)_n-$, or $HOOC(CH_2)_n-$, wherein X is chlorine, bromine, iodine, methanesulfonyl, or toluenesulfonyl, and A^1 , A^2 , A^3 , A^4 , V, m and n are as defined in claim 1, with $ClSO_2-A^5$, $ClCOO-A^5$, $ClCSO-A^5$, $OCN-A^5$, $SCN-A^5$, $HOOC-A^5$, or $ClSO_2NR^1-A^5$, wherein A^5 is as defined in claim 1.

117. (new) A pharmaceutical composition comprising a compound according to claim 100 and at least one of a pharmaceutically acceptable carrier or a pharmaceutically acceptable adjuvant.

118. (new) A compound of formula (I)



wherein

U is O or a lone pair;

V is O;

m and n are each integers from 1 to 7 and m+n is 1 to 7;

W is SO₂,

A¹ is H, lower-alkyl or lower-alkenyl,

A² is cycloalkyl, cycloalkyl-lower-alkyl, lower-alkenyl, lower-alkynyl or lower-alkyl optionally substituted with hydroxy, lower-alkoxy or lower-alkoxy-carbonyl, or

A¹ and A² bond together to form -A¹-A²-, wherein -A¹-A²- is lower-alkylene or lower-alkenylene, optionally substituted by R², and one -CH₂- group of -A¹-A²- is optionally replaced by NR³, S, or O;

A³ and A⁴ are independently hydrogen or lower-alkyl;

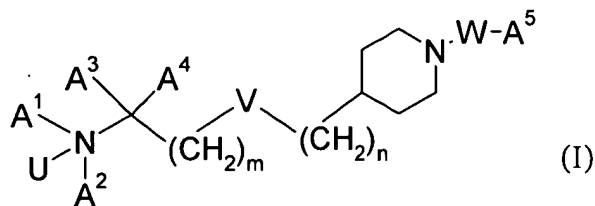
A⁵ is lower-alkyl optionally substituted with halogen, lower-alkenyl, lower-alkoxy-carbonyl-lower-alkyl, cycloalkyl, cycloalkyl-lower-alkyl, aryl, aryl-lower-alkyl, heteroaryl, or heteroaryl-lower-alkyl;

R² is lower-alkyl, hydroxy, hydroxy-lower-alkyl, or N(R⁴,R⁵);

R¹, R³, R⁴ and R⁵ are independently hydrogen or lower-alkyl; and

When A¹ is not bonded to A², A¹ and A³ optionally bond together to form -A¹-A³-, wherein -A¹-A³- is lower-alkylene or lower-alkenylene, optionally substituted by R², and one -CH₂- group of -A¹-A³- is optionally replaced by NR³, S, or O; or
pharmaceutically acceptable salts or esters of the compounds of formula (I).

119. (new) A compound of formula (I)



wherein

U is O or a lone pair;

V is O;

n is the integer 0;

m is an integer from 1 to 2;

W is SO₂,

A¹ is H, lower-alkyl or lower-alkenyl,

A² is cycloalkyl, cycloalkyl-lower-alkyl, lower-alkenyl, lower-alkynyl or lower-alkyl optionally substituted with hydroxy, lower-alkoxy or lower-alkoxy-carbonyl, or

A¹ and A² bond together to form -A¹-A²-, wherein -A¹-A²- is lower-alkylene or lower-alkenylene, optionally substituted by R², and one -CH₂- group of -A¹-A²- is optionally replaced by NR³, S, or O;

A³ and A⁴ are independently hydrogen or lower-alkyl;

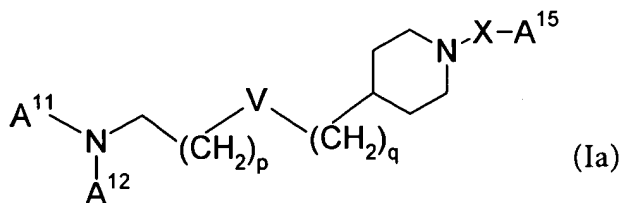
A⁵ is lower-alkyl optionally substituted with halogen, lower-alkenyl, lower-alkoxy-carbonyl-lower-alkyl, cycloalkyl, cycloalkyl-lower-alkyl, aryl, aryl-lower-alkyl, heteroaryl, or heteroaryl-lower-alkyl;

R² is lower-alkyl, hydroxy, hydroxy-lower-alkyl, or N(R⁴, R⁵);

R¹, R³, R⁴ and R⁵ are independently hydrogen or lower-alkyl; and

When A¹ is not bonded to A², A¹ and A³ optionally bond together to form -A¹-A³-, wherein -A¹-A³- is lower-alkylene or lower-alkenylene, optionally substituted by R², and one -CH₂- group of -A¹-A³- is optionally replaced by NR³, S, or O; or pharmaceutically acceptable salts or esters of the compounds of formula (I).

120. (new) A compound of compounds of formula (Ia)



wherein

V is -CH₂-, -CH=CH-, or -C≡C-;

p is an integer from 0 to 5;

q 0, 1 or 2;

X is SO₂, or SO₂NH, with the provisos that:

a) p+q is 1 or 2 when V is -CH₂- and X is SO₂,

b) p=q=0 when V is -CH=CH- and X is SO₂,

A¹¹ is methyl or ethyl;

A¹² is cyclopropyl, lower-alkenyl, or lower-alkyl optionally substituted with hydroxy or lower-alkoxy; and

A¹⁵ is lower-alkyl optionally substituted with halogen, lower-alkenyl, lower-alkoxy-carbonyl-lower-alkyl, cycloalkyl, cycloalkyl-lower-alkyl, aryl, aryl-lower-alkyl, heteroaryl, or heteroaryl-lower-alkyl; or

pharmaceutically acceptable salts or esters of the compounds of formula (Ia).

121. (new) The compound of claim 120, wherein A¹² is cyclopropyl, lower alkenyl of 2 to 4 carbon atoms, lower alkyl of 1 to 4 carbon atoms, lower alkoxy of 1 to 4 carbon atoms, lower alkyl substituted with a lower-alkoxy having a total of 2 to 4 carbon atoms, or lower alkyl substituted with hydroxy.

122. (new) The compound of claim 121, wherein A¹⁵ is lower alkyl, cycloalkyl, cycloalkyl-lower alkyl, aryl or aryl-lower-alkyl.

123. (new) The compound of claim 122, wherein V is -CH₂-.

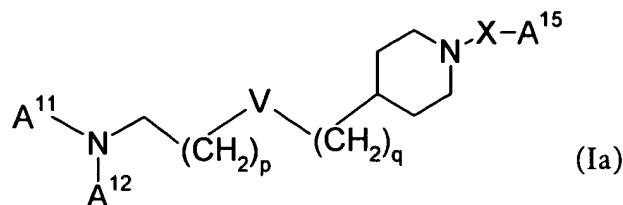
124. (new) The compound of claim 122, wherein V is -CH=CH-.

125. (new) The compound of claim 122, wherein V is -C≡C-.

126. (new) The compound of claim 125, wherein X is SO₂.

127. (new) The compound of claim 125, wherein X is SO₂NH.

128. (new) A compound of compounds of formula (Ia)



wherein

V is O;

p is an integer from 0 to 5;

q 0, 1 or 2;

X is SO₂NH, with the provisos that:

a) p is 1 to 5 when V is O;

A¹¹ is methyl or ethyl;

A¹² is cyclopropyl, lower-alkenyl, or lower-alkyl optionally substituted with hydroxy or lower-alkoxy; and

A¹⁵ is lower-alkyl optionally substituted with halogen, lower-alkenyl, lower-alkoxy-carbonyl-lower-alkyl, cycloalkyl, cycloalkyl-lower-alkyl, aryl, aryl-lower-alkyl, heteroaryl, or heteroaryl-lower-alkyl; or

pharmaceutically acceptable salts or esters of the compounds of formula (Ia).

129. (new) The compound of claim 128, wherein A¹² is cyclopropyl, lower alkenyl of 2 to 4 carbon atoms, lower alkyl of 1 to 4 carbon atoms, lower alkoxy of 1 to 4 carbon atoms, lower alkyl substituted with a lower-alkoxy having a total of 2 to 4 carbon atoms, or lower alkyl substituted with hydroxy.

130. (new) The compound of claim 129, wherein A¹⁵ is lower alkyl, cycloalkyl, cycloalkyl-lower alkyl, aryl or aryl-lower-alkyl.

131. (new) The compound of claim 130, wherein A¹⁵ is lower alkyl.

132. (original) The compound of claim 130, wherein A¹⁵ is cycloalkyl-lower-alkyl.

133. (original) The compound of claim 130, wherein A¹⁵ is phenyl.

134. (original) The compound of claim 130, wherein A¹⁵ is phenyl substituted with at least one

135. (original) The compound of claim 130, wherein A¹⁵ is phenyl substituted with trifluoromethyl.